

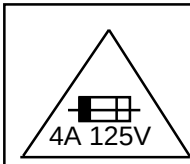
IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.

To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A-125V FUSE.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.

It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.

2. It is essential that servicemen have available at all times an accurate high voltage meter. The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver. Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

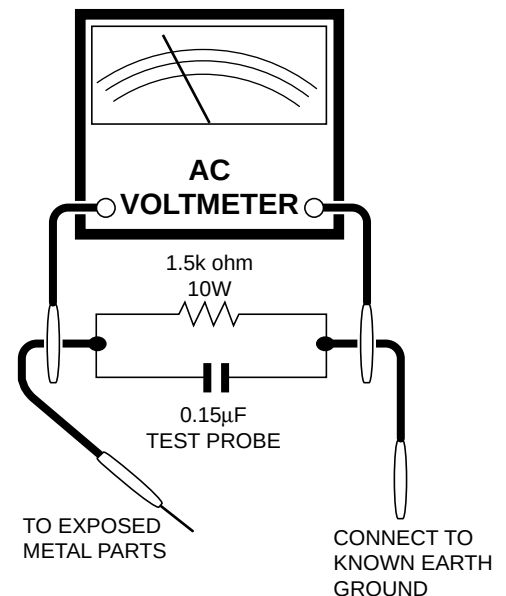
Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
 - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.

- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)

Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " $\triangle$ " and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

LOCATION OF USER'S CONTROL

Front Panel

POWER

Press → On.
Press again → Off.

SENSOR AREA FOR REMOTE CONTROL

MENU

Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

VOLUME UP/DOWN

(+) Increases sound.
(-) Decreases sound.

VIDEO/AUDIO [IN2] TERMINALS

CHANNEL UP/DOWN

(▲) Selects next higher channel.
(▼) Selects next lower channel.
• Press both at the same time to access the MAIN MENU screen.

Basic Remote Control Functions

POWER

Press → On.
Press again → Off.

REMOTE KEYPAD

Accesses any channel from keypad.

FLASHBACK

Returns to previous channel.

PERSONAL PREFERENCE

With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons.

VOLUME UP/DOWN

(+) Increases sound.
(-) Decreases sound.
• In menu mode, changes or selects the TV adjustments.

MENU

Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

CATV/DVD-TV/VCR MODE SELECT SWITCH

In TV/VCR position, sends power and channel select commands (Channel up/down and Random Access buttons) to the TV and VCR control.

In CATV/DVD position, sends power and channel select commands to a cable TV converter and DVD control.

DVD/VCR CONTROL

Infrared Transmitter Window

DISPLAY

Press → Displays receiving channel for four seconds.

Press again → Removes display.
• Temporarily displays receiving channel when in Closed Caption mode.

INPUT

Press → Switch to external video INPUT 1 mode.
Press 2 times → Switch to external video INPUT 2 mode.
Press 3 times → Switch back to the original TV mode.

ENTER

Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button.

CHANNEL UP/DOWN

(▲) Selects next higher channel.
(▼) Selects next lower channel.
• Moves the "◆" mark of the MENU screens.

MUTE

Press → Mutes sound.
Press again → Restores sound.
• CLOSED CAPTION appears when sound is muted.

Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

INSTALLATION AND SERVICE INSTRUCTIONS

- Note:** (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
 (2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 and make sure that the voltmeter reads $21.9 \pm 1.4V$.
5. Apply external 27.8V DC at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and make a short circuit between TP651 and TP652. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "S03" and Bus data "01" (Y-mute on).
4. The voltage should be approximately, 27.8kV (at zero beam).

If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required.

To enter the service mode and exit service mode.

While pressing the Vol-up and Ch-up buttons at the sametime, plug the AC cord into a wall socket.

Now, the TV set is switched on and enters the service mode.

To exit the service mode, turn the television off by pressing the power button.

1. Service mode.

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer control are in their proper (reset) position.

2. Service number selection.

In the service mode, you will see the window screen as window ①. There are 4 adjustment categories ②DEF, ③SIGNAL, ④FEATURE, ⑤FIX VALUE as show in **Figure A**.

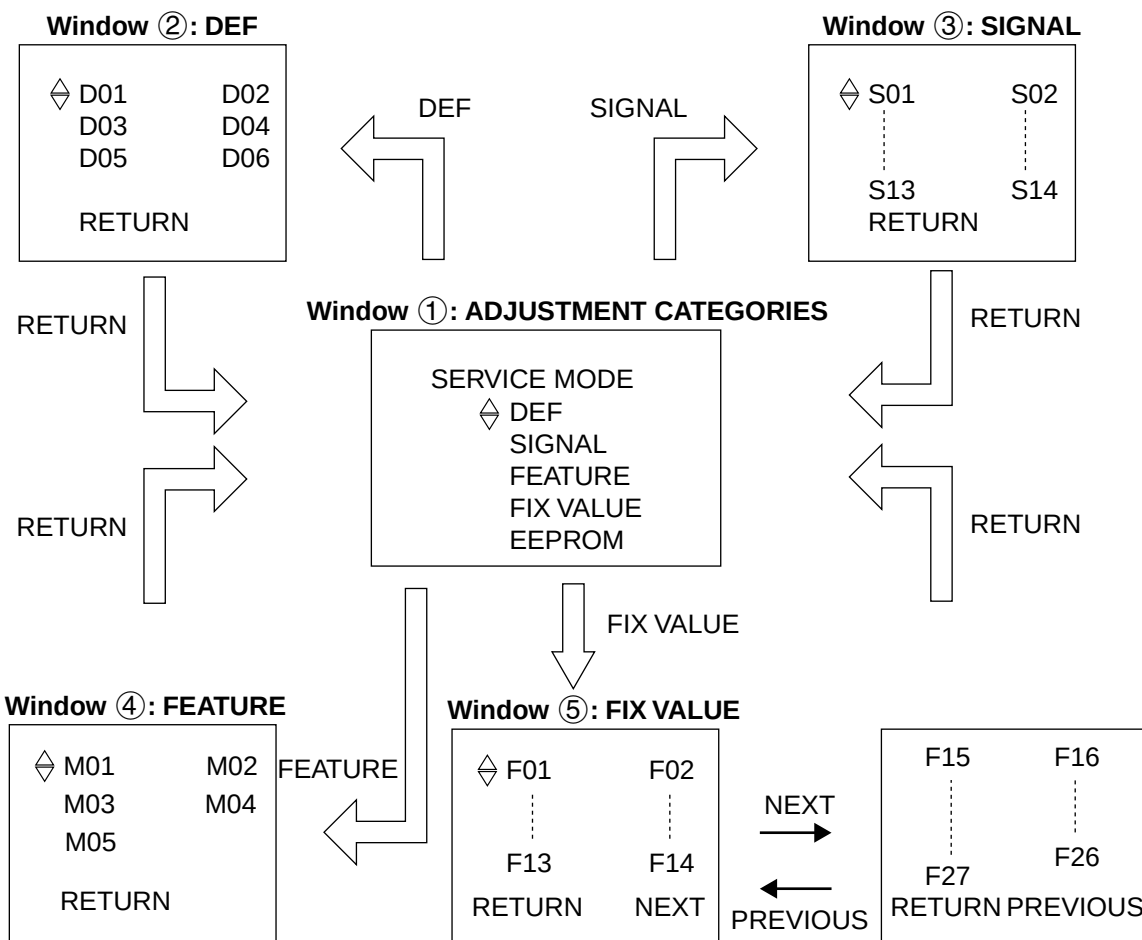


Figure A: ADJUSTMENT CATEGORIES

Press CH UP/DOWN button for selection and enter by VOL UP or VOL DOWN.
Press CH UP/DOWN button to select the adjustment item and VOL UP/DOWN to adjust the data number for each categories.

(OSD disturbance can be erased by R/C display key)

(Note: EEPROM - factory used only)

Below are the adjustments ranges and initial values for FIX VALUE category.

FIX VALUE

SERVICE POSITION	ADJUST ITEM	DATA		
		RANGE	INITIAL VALUE	(Hex)
F01	OPTION 1	00-FF	B3	B3
F02	OPTION 2	00-FF	07	07
F03	E-SAVE	00-3F	2A	2A
F04	TUNER SETUP	00, 01	00	00
F05	R-TONE RD	00-7F	03	03
F06	R-TONE BD	00-7F	7C	7C
F07	B-TONE RD	00-7F	00	00
F08	B-TONE BD	00-7F	04	04
F09	FM LEVEL	00-1F	16	16
F10	AFC GAIN	00, 01	00	00
F11	G DRIVE	00, 0F	0F	0F
F12	FBT BLK SW	00, 01	01	01
F13	V COMP	00-07	07	07
F14	OSD CONT	00-03	01	01
F15	SHARPNESS	00-3F	0D	19
F16	FLT SYS	00-07	01	01
F17	KILLER OP	00-07	02	02
F18	PRE SHOOT	00-03	00	00
F19	CORING	00-03	04	04
F20	DC REST	00-03	02	02
F21	BS START	00-03	01	01
F22	BS GAIN	00-03	01	01
F23	ABL START	00-07	00	00
F24	R/B ANGLE	00-0F	08	08
F25	H BLK R	00-0F	03	03
F26	H BLK L	00-0F	00	00
F27	YC	00-07	05	04

Table - A

Below are the ranges and initial values for each adjustment and in each categories.

DEF

SERVICE POSITION	ADJUST ITEM	DATA		ADJUSTMENT CONTENTS
		RANGE	INITIAL VALUE	
D01	H-PHASE	00-1F	0C	
D02	V-SIZE	00-7F	40	
D03	V-POSITION	00-3F	20	
D04	CC-POSITION	00-FF	1A	
D05	V-LINEARITY	00-1F	18	Must be "13"
D06	V-S-CORRECTION	00-1F	0C	Must be "10"

Table - B

SIGNAL

SERVICE POSITION	ADJUST ITEM	DATA		ADJUSTMENT CONTENTS
		RANGE	INITIAL VALUE	
S01	RF AGC	00-3F	14	
S02	VIDEO LEVEL	00-07	03	
S03	Y-MUTE	00-03	00	"01": Y-MUTE, "02": V-STOP & Y-MUTE "03": Activate color killer circuit.
S04	SUB BIAS	00-FF	30	Must be "30"
S05	R-BIAS	00-FF	00	
S06	G-BIAS	00-FF	00	
S07	B-BIAS	00-7F	00	
S08	R-DRIVE	00-7F	53	
S09	B-DRIVE	00-7F	53	
S10	CONTRAST	00-7F	5A	
S11	TINT	00-7F	40	
S12	COLOR	00-7F	40	
S13	BRIGHTNESS	00-7F	40	
S14	BRIGHTNESS 2	00-7F	40	

Note: Refer to the SERVICE ADJUSTMENT for each corresponding values.

Table - C**FEATURE**

SERVICE POSITION	ADJUST ITEM	DATA		ADJUSTMENT CONTENTS
		RANGE	INITIAL VALUE	
M01	MS LEVEL	00-0F	0A	
M02	MTS-VCO	00-3F	20	
M03	FILTER	00-3F	1C	
M04	LOW SEPARATION	00-3F	20	
M05	HIGH SEPARATION	00-3F	1B	

Note: Refer to the SERVICE ADJUSTMENT for each corresponding values.

Table - D

Holding down both the Vol-up/Ch-down buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2102.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2102.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201.
IC2102	X		Holding down both the Vol-up/Ch-down buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2102.
IC3001	X		Adjust items related MTS only.
CRT	X		Adjust items related to picture tube only.

Table - E

■ SERVICE ADJUSTMENT

Note: Before making the service adjustment, make the bus data settings.

+B Adjustment

(1) For the chassis with the +B adjustment control

1. Receive a good local channel.
2. Select VIDEO ADJUSTMENT RESET on the menu to get the video reset.
3. Connect a DC voltmeter between the +B line (at SW transformer) of R611 and the ground terminal.
4. Adjust R738 so that the voltmeter should read $128.5 \pm 0.5V / -0.25V$.

(2) For the chassis without the +B adjustment control

1. Receive a good local channel.
2. Select VIDEO ADJUSTMENT RESET on the menu to get the video reset.
3. Connect a DC voltmeter between the +B line (at SW transformer) of R611 and the ground terminal.
4. Make sure that the voltmeter reads $128.5 \pm 1.5V$.

Video Level (TV Det Video Level)

Adjustment

1. Receive a good local channel.
2. Enter the service mode signal category and select the service adjustment "S02".
3. Set the data value to "02" first, then adjust the data to "04". (If out of spec, readjust the data in the range of "00" to "07" to obtain a normal contrast level.)

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode signal category and select the service adjustment "S01".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.

Note: You have to exit the service mode first to select another channel.

Screen Adjustment

1. Connect to oscilloscope probe between TP854 and ground of the CRT unit.
2. Receive a good local channel.
3. Enter the service mode Signal category and set the service adjustment "S04" to step 30. Then select the service adjustment "S12" and set the data value to "00" to set the color level to the minimum level. (record the original data first). You may skip this step, if you selected a B/W picture or monoscope pattern. Set also the "S05/S06/S07" data to minimum level ("00").

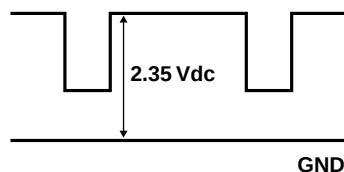


Figure B: WAVEFORM FOR SCREEN ADJUSTMENT

4. Select the service adjustment "S03" and set the data value to "01" to turn off the luminance signal (Y-mute).
5. Select the service adjustment "S14" and adjust the data value to obtain 2.35 volts as shown in **Figure B**.
6. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
7. Adjust the service adjustment "S05" red, "S06" green, "S07" blue to obtain a good grey scale with normal white at low brightness level.
8. Select the service adjustment "S03" and reset data to "00". Select the service adjustment "S12" and reset data to obtain normal color level.
9. Remove probe and reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Select the service adjustment "S12" and set the data value to "00" to set the color level to the minimum. You may skip this step, if you selected a B/W picture or monoscope.
3. Alternately adjust the service adjustment data of "S08" and "S09" until a good grey scale with normal white is obtained.
4. Select the service adjustment "S12" and reset data to obtain normal color level.

Sub-Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service adjustment "S10".
4. Adjust the data value to achieve normal contrast range.

Sub-Tint Adjustment

1. Receive a good local channel.
2. Set the customer tint control to the center of its range.
3. Enter the service mode and select the service adjustment "S11".
4. Adjust "S11" data value to obtain normal fresh tones.

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position.
3. Enter the service mode and select the service adjustment "S12".
4. Adjust "S12" data value to obtain normal color level.

Sub-Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service adjustment "S13".
4. Adjust "S13" data value to obtain normal brightness level.

Vertical-Size, V-Linearity and V-S Correction Adjustments

1. Receive a good local channel.
2. Enter the service mode DEF category and select the adjustment "D02" for Vertical Size, "D05" for V-Linearity and "D06" for V-S Correction Adjustment.
3. Set in order "D05" for V-Linearity, "D06" for V-S Correction and set the data to get the best linearity.
4. Then adjust "D02" data until it become a proper vertical size.

Horizontal Position Adjustment

1. Receive a good local channel.
2. Enter the service mode DEF category and select the adjustment "D01".
3. Adjust "D01" data value to center the picture.

Vertical-Phase Adjustment

1. Receive a good local channel.
2. Enter the service mode DEF category and select the adjustment "D03".
3. Adjust "D03" bus data to get the most acceptable vertical position.

**Note: The step range is 20 (32)+12 (3 steps)/
-20 (5 steps).
(Push once move 4 steps.)**

Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode DEF category and select the adjustment "D04".
3. A black text box will appear on the screen. (see **Figure C.** below)
4. Adjust "D04" data value to balance the text box position in the center. (A=B).

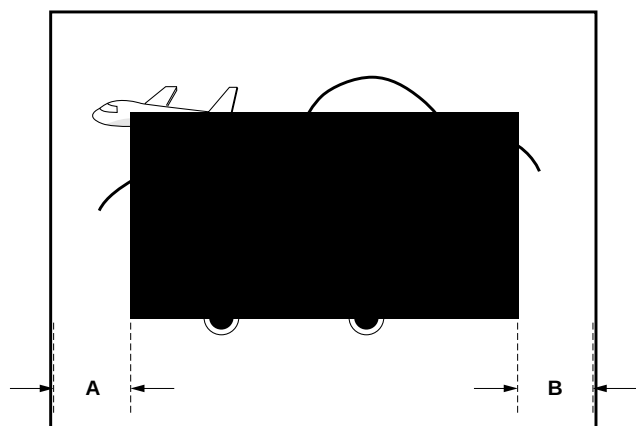


Figure C.

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Feed the following monaural signal to pin (14) of IC3001.
Monaural signal: 300Hz, 245mVrms
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service adjustment "M01".
4. Adjust the data so that the rms voltmeter reads $490 \pm 10\text{mVrms}$.

MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100 μF , 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02".
5. Adjust the data so that the frequency counter reads $62.94 \pm 0.75\text{kHz}$.

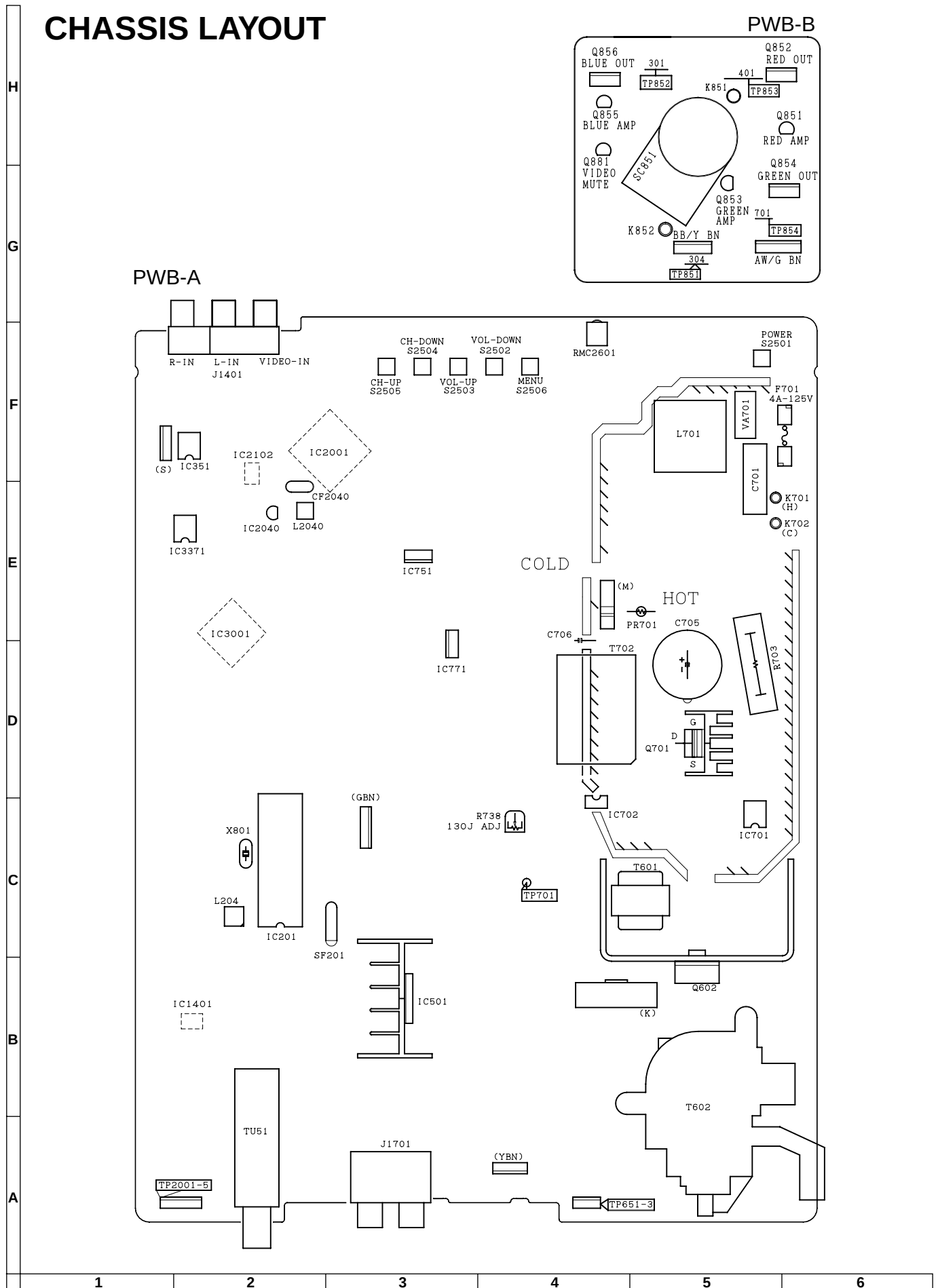
Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 .
Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data at the point where "OK" appears on the screen. The "OK" represents the approximate center of the adjustable range of the data.

Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.
Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service adjustment "M04".
4. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
5. Receive the following composite stereo signal 2.
Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service adjustment "M05".
7. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

CHASSIS LAYOUT





DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. The unit of resistance "ohm" is omitted.
($K=k\Omega=1000\Omega$, $M=M\Omega$)
2. All resistors are 1/16 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted.
($P=pF=\mu\mu F$)
4. (G) indicates $\pm 2\%$ tolerance may be used.
5. $\overline{\text{---}}$ indicates line isolated ground.

VOLTAGE MEASUREMENT CONDITIONS:

1. All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.
2. All voltages measured with $1000\mu V$ B & W or Color signal.

WAVEFORM MEASUREMENT CONDITIONS:

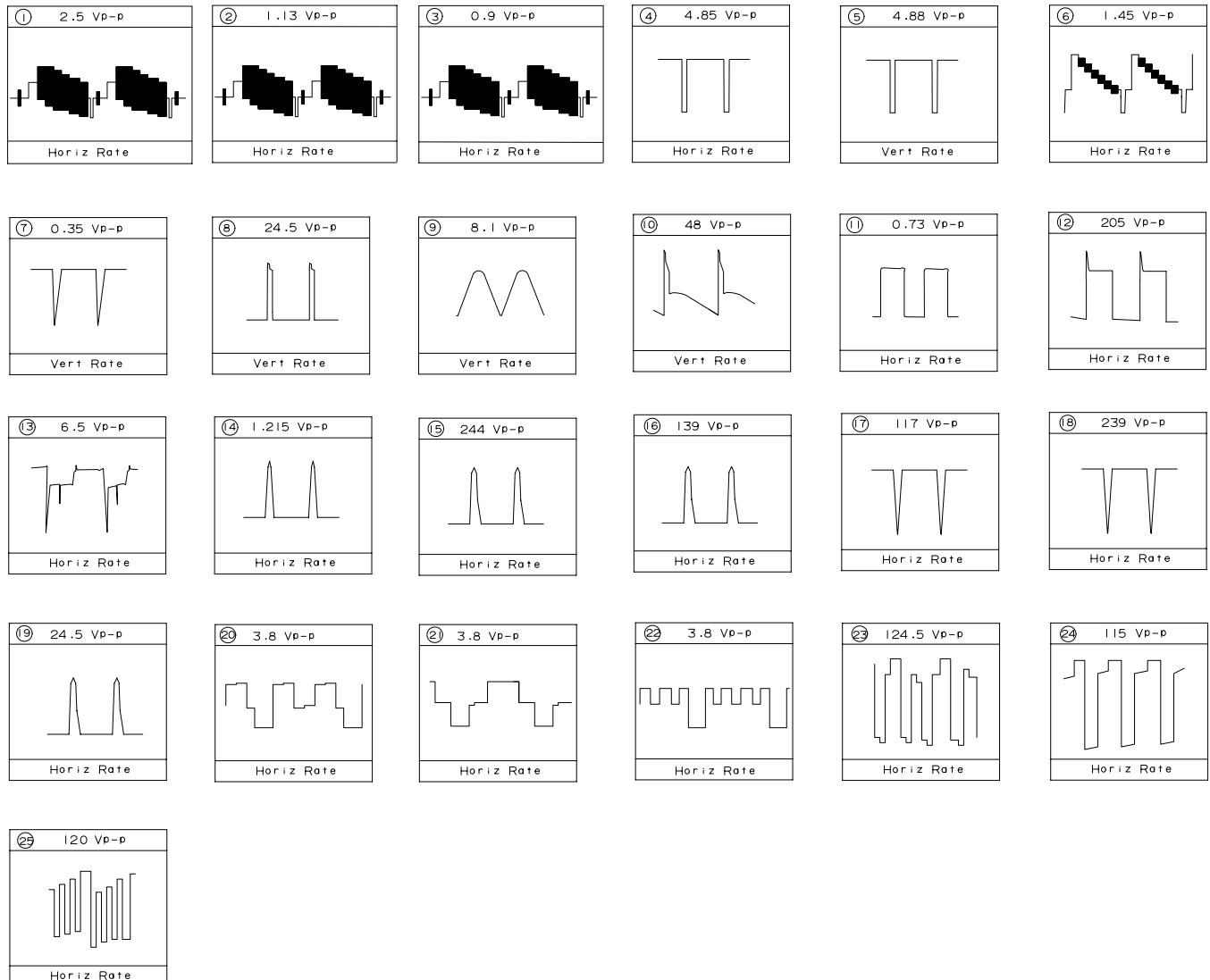
1. Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.
2. $\bigcirc$ indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)

$\triangle$ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.

$\blacktriangle$ MARK= X-RAY RELATED PARTS.

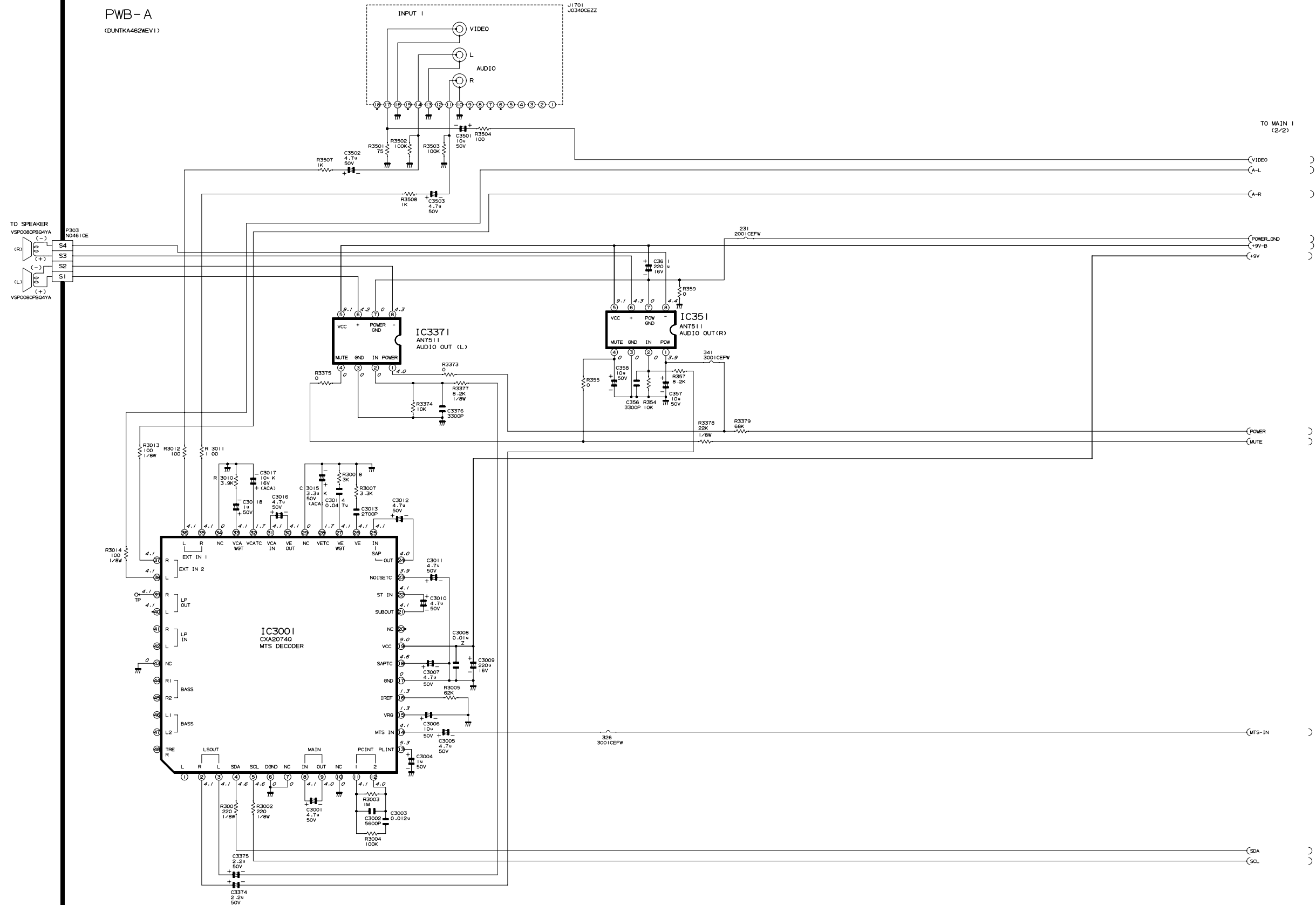
This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

WAVE FORMS



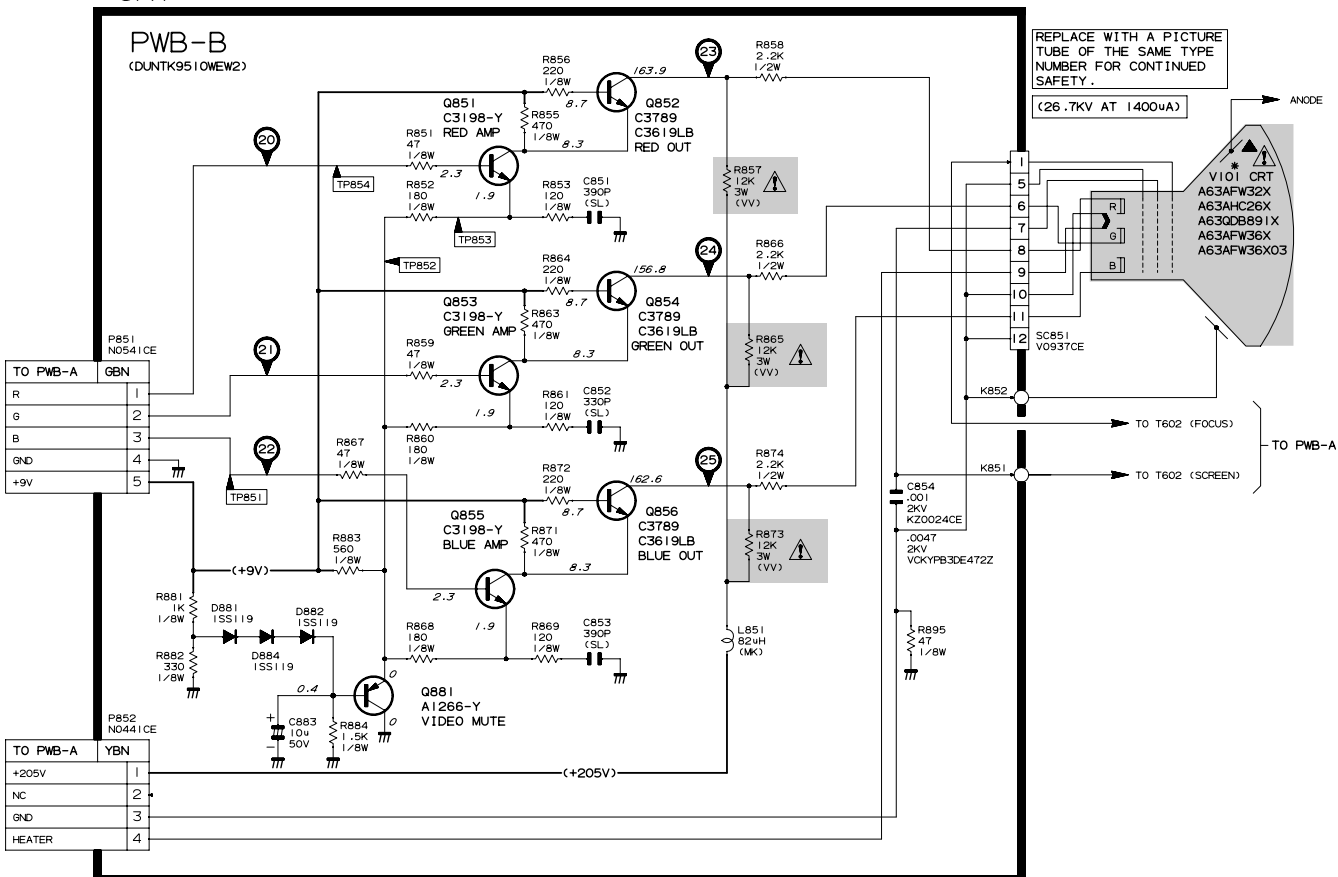
SCHEMATIC DIAGRAM: MAIN-2 Unit

MAIN2



SCHEMATIC DIAGRAM: CRT Unit

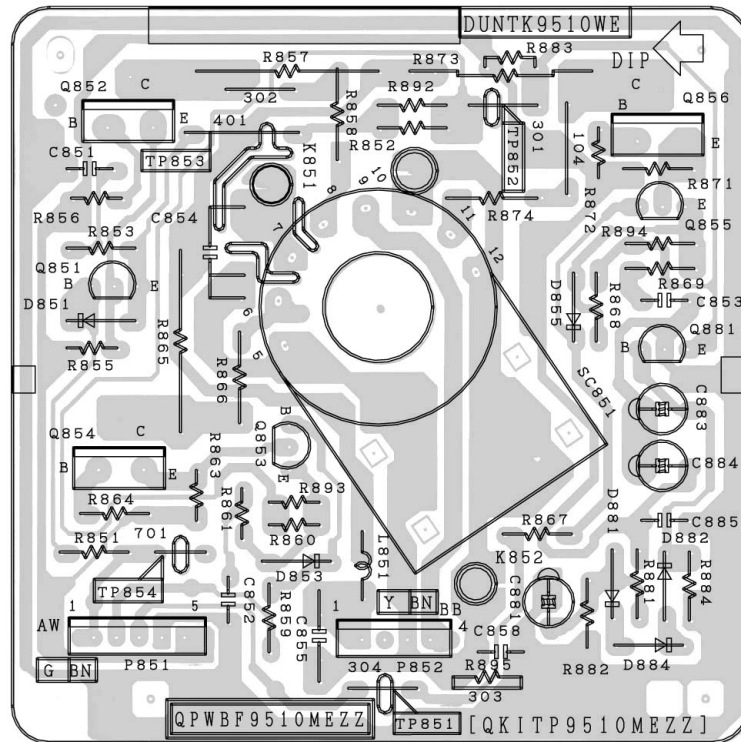
CRT

PWB-B
(DUNK9510MEW2)

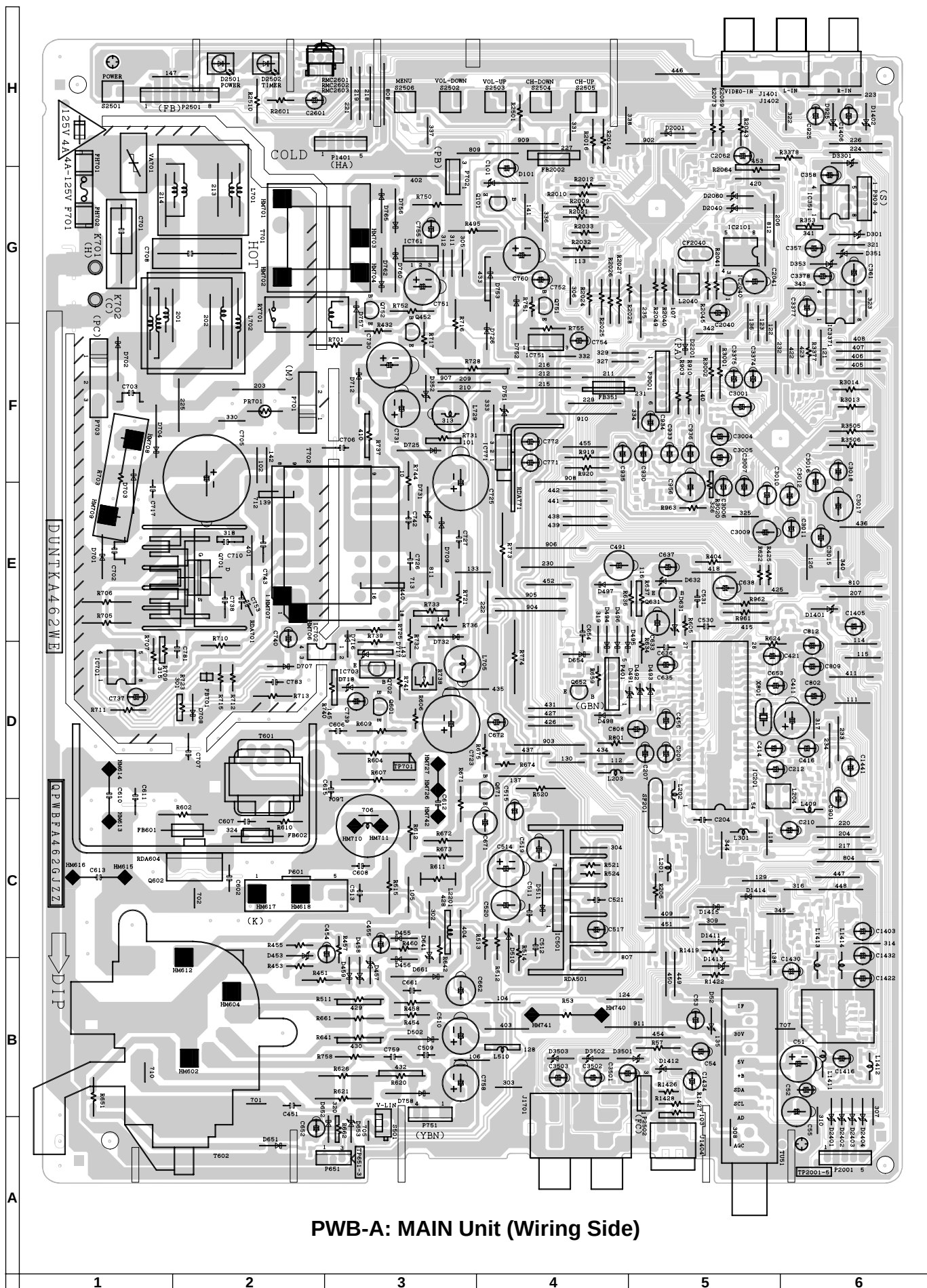
* NOTE

	CRT	DY	R626	R621
COMBINATION	A63AFW36X A63AFW32X	C1LH0109GJ	2.7/1W	-
	A63AHC26X	C1LH0110GJ	-	1.2/2W
	A63QDB891X	C1LH0111GJ	2.7/1W	-
	A63AFW36X03	1TC	2.7/1W	-

PRINTED WIRING BOARD ASSEMBLIES



PWB-B: CRT Unit (Wiring Side)



PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |

in **USA**: Contact your nearest SHARP Parts Distributor to order.
For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK: X- RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

▲ 	V101	VB63AFW32X/*S	X	CRT (DY601: CiLH0109GJ)	CC
		or			
		VB63AHC26X/*S		CRT (DY601: CiLH0110GJ)	
		or			
		VB63QDB891X/*S		CRT (DY601: CiLH0111GJ)	
		or			
		VB63AFW36X/*S		CRT (DY601: CiLH0109GJ)	
		or			
		VB63AFW36031E		CRT (I.T.C)	
▲ 	DY601	RCiLH0109GJZZ	X	DY (V101: A63AFW32X or A63AFW36X)	BB
		or			
		RCiLH0110GJZZ		DY (V101: A63AHC26X)	
		or			
		RCiLH0111GJZZ		DY (V101: A63QDB891X)	
	L703	RCiLG0036MEZZ	X	Degaussing Coil	AN
		or			
		RCiLG0038MEZZ			
		MSPRT0002MEZZ	X	Spring	AE
		PMAGF3046CEZZ	J	Purity Magnet	AF
		QEARC2508MEZZ	X	Grounding Strap	AG

	CRT	DY	R626	R621
COMBI-NATION	A63AFW36X A63AFW32X	CiLH0109GJ	2.7/1W	-
	A63AHC26X	CiLH0110GJ	-	1.2/2W
	A63QDB891X	CiLH0111GJ	2.7/1W	-
	A63AFW36X03	ITC	2.7/1W	-

Ref. No. Part No. ★ Description Code

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A DUNTKA462WEV1	-	MAIN Unit	-
PWB-B DUNTK9510WEW2	-	CRT Unit	-

PWB-A: DUNTKA462WEV1 MAIN UNIT

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

	TU51	VTUVTST5UF740	X	Tuner	AX
		or			
		VTUENV56DA1G3			

	TU51	R57
COMBI-NATION	ENV56DA1G3	56K / 1/8W
	VTST5UF740	56K / 1/8W

INTEGRATED CIRCUITS

▲ 	IC201	RH-iX3354CEN1	X	I.C.	AS
	IC351	VHiAN7511/-1	J	AN7511	AK
	IC501	VHiLA7840/-1	J	LA7840	AR
	IC701	VHiTEA1507/-1	J	TEA1507P/N1	AL
	IC702	RH-FX0034CEZZ	J	PC817	AE
		or			
		RH-FX0002GEZZ			
		or			
		RH-FX0029CEZZ			
	IC751	VHiKA7809AP-1	J	KA7809API	AE
	IC771	VHiKA7805AP-1	J	KA7805API	AE
		or			
		VHiTA7805S/-1			
	IC1401	VHiMM1111XF1E	J	MM1111XFBE	AE
	IC2001	RH-iX3528CEZZQ	X	I.C.	AT
	IC2040	VHiPST994C/-1	J	PST994C	AD
	IC2102	VHiBR2416E2-1	J	BR24C16F	AK
		or			
		VHiSLA24C16-1			
	IC3001	VHiCXA2074Q-1	J	CXA2074Q	AY
	IC3371	VHiAN7511/-1	J	AN7511	AK

TRANSISTORS

Q101	VS2SC3198-Y-1	J	2SC3198-Y	AA
	or			
	VS2SC945AQ/-1			
Q201	VS2SC2735//1E	J	2SC2735	AC
Q301	VS2SC3928R/-1	J	2SC3928R	AB
	or			
	VS2PD601AR/-1			
Q451	VS2SB709AR/-1	J	2SB709AR	AC
Q452	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q491	VS2SB709AR/-1	J	2SB709AR	AC
Q601	VS2SC2482//-1	J	2SC2482	AD
△ Q602	VS2SD2539//1E	J	2SD2539	AP
	or			
	VS2SD2634++-1			
Q631	VS2SC3198-Y-1	J	2SC3198-Y	AA
	or			
	VS2SC945AQ/-1			
Q651	VS2SB709AR/-1	J	2SB709AR	AC
Q652	VS2SA1266-Y-1	J	2SA1266-Y	AA
Q653	VS2SC3928R/-1	J	2SC3928R	AB
	or			
	VS2PD601AR/-1			

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA462WEV1									
MAIN UNIT (Continued)									
△ Q701	VSSPP07N60C-1 or VSSPP07N60S-1 or VSSPP04N60C-1 or VS2SK2708//1E or VS2SK2645//G or VSSTP6NC60+-1 or VSSTP6NC60F-1 or VSSTP7NB60F-1	X	FET	AF	△ D703	RH-DX0154CEZZ or RH-DX0490CEZZ or RH-DX0279CEZZ	J	Diode	AC
Q702	VS2SC3198-Y-1 or VS2SC945AQ/-1	J	2SC3198-Y	AA	△ D704	RH-DX0154CEZZ or RH-DX0490CEZZ or RH-DX0279CEZZ	J	Diode	AC
Q703	VS2SB709AR/-1	J	2SB709AR	AC	D707	VHD1SS119//1	J	Diode	AB
Q752	VS2SC3198-Y-1 or VS2SC945AQ/-1	J	2SC3198-Y	AA	D708	VHD1SS119//1 or VHD1SS244//1	J	Diode	AB
Q2201	VS2SC3928R/-1 or VS2PD601AR/-1	J	2SC3928R	AB	△ D709	RH-DX0229CEZZ	J	Diode	AF
Q2211	VS2SC3928R/-1	J	2SC3928R	AB	△ D712	VHDD1NS4///1 or RH-DX0302CEZZ or RH-DX0468CEZZ or RH-DX0513CEZZ or RH-DX0487CEZZ or RH-DX0488CEZZ	J	Diode	AE
DIODES					D717	RH-EX0616GEZZ	J	Zener Diode, 5.6V	AA
D52	RH-EX0676GEZZ	J	Zener Diode, 32V	AA	△ D725	RH-DX0131CEZZ or RH-DX0468CEZZ	J	Diode	AC
D101	RH-EX0616GEZZ	J	Zener Diode, 5.6V	AA	D726	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB
D453	RH-EX0616GEZZ	J	Zener Diode, 5.1V	AA	D732	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB
D455	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	D753	RH-DX0441CEZZ or RH-DX0110CEZZ	J	Diode	AC
D494	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	△ D758	RH-DX0131CEZZ	J	Diode	AC
D495	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	D2201	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB
D496	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	△ VA701	RH-VX0048CEZZ or RH-VX0035CEZZ or RH-VX0019CEZZ or RH-VX0074CEZZ	J	Varistor	AE
D497	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	PACKAGED CIRCUITS				
△ D502	RH-DX0131CEZZ	J	Diode	AC	△ PR701	RMPTP0092CEZZ	J	Packaged Circuit	AH
D511	RH-DX0441CEZZ	J	Diode	AC	X801	RCRSB0001PEZZ or RCRSB0205CEZZ	R	Crystal	AL
D632	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA	FILTERS AND COILS				
D641	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA	CF2040	RFiLA0099CEZZ	J	Ceramic Filter	AE
△△ D651	VHD1SS244//1	J	Diode	AB	SF201	RFiLC0405CEZZ	J	SAW Filter	AH
△△ D653	RH-EX0666GEZZ	J	Zener Diode, 2.7V	AB	L201	VP-XF1R2K0000	J	Peaking 1.2μH	AB
D654	VHD1SS119//1 or RH-DX0475CEZZ	J	Diode	AB	L203	VP-XF220K0000	J	Peaking 22μH	AB
△ D661	RH-DX0468CEZZ or RH-DX0229CEZZ	J	Diode	AE	L204	RCiLi0632CEZZ	J	IF Coil	AE
△ D701	RH-DX0154CEZZ or RH-DX0490CEZZ or RH-DX0279CEZZ	J	Diode	AC	L301	VP-XF150K0000	J	Peaking 15μH	AB
△ D702	RH-DX0154CEZZ or RH-DX0490CEZZ or RH-DX0279CEZZ	J	Diode	AC	△ L701	RCiLF0078PEZZ or RCiLF0025PEZZ	R	Coil	AF
					L705	RCiLP0179CEZZ	J	Coil	AD
					L2040	RCiLB0131CEZZ	J	Oscillation Coil	AE

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA462WEV1				
MAIN UNIT (Continued)				
TRANSFORMERS				
△ T601	RTRNZ0057PEZZ	R	Transformer	AK
	or			
	RTRNZ0731CEZZ			
▲△ T602	RTRNF0049MEZZ	X	H-Volt Transformer	AY
△ T702	RTRNW0001GJZZ	X	Transformer	AN
CONTROLS				
▲△ R738	RVR-M4588CEZZ+	X	22k (B) 130V Adj.	AE
	or			
	RVR-M4628GEZZ			
	or			
	RVR-M4336CEZZ			
CAPACITORS				
[EL. ... Electrolytic, M-Poly. ... Metalized Polypro Film]				
C51	VCEA0A1AW108M	J	1000 10V EL.	AC
C53	VCEA0A1HW105M	J	1.0 50V EL.	AB
C54	VCEA0A1HW475M	J	4.7 50V EL.	AB
C101	VCEA0A1CW476M	J	47 16V EL.	AB
C201	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C202	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C203	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C204	VCQYTA1HM223K	J	0.022 50V Mylar	AB
C205	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C206	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C207	VCEA0A1CW476M	J	47 16V EL.	AB
C208	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C209	VCEA0A1HW105M	J	1.0 50V EL.	AB
C210	VCEA0A1HW474M	J	0.47 50V EL.	AB
C212	VCEA0A1HW474M	J	0.47 50V EL.	AB
C220	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C301	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C302	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C303	VCCCCY1HH331J	J	330p 50V Ceramic	AA
C304	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C305	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C356	VCKYCY1HB332K	J	3300p 50V Ceramic	AA
C357	VCEA0A1HW106M	J	10 50V EL.	AB
C358	VCEA0A1HW106M	J	10 50V EL.	AB
C361	VCEA0A1CW227M	J	220 16V EL.	AC
C411	VCEA0A1AW108M	J	1000 10V EL.	AC
C412	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C414	VCEA0A1HW225M	J	2.2 50V EL.	AB
C416	VCEA0A1HW105M	J	1.0 50V EL.	AB
C451	VCQYTA1HM104K	J	0.1 50V Mylar	AC
C454	VCEA0A1HW475M	J	4.7 50V EL.	AB
C456	VCEA0A1HW106M	J	10 50V EL.	AB
C491	VCEA0A1CW107M	J	100 16V EL.	AC
C492	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C510	VCEA0A1VW477M	J	470 35V EL.	AB
C511	VCCSPA2HL180K	J	18p 500V Ceramic	AA
C512	VCFYSA1JB224J+	X	0.22 63V Mylar	AF
C513	VCFYSA1JB473J	J	0.047 63V Mylar	AC
C514	VCEA0A1VW477M	J	470 35V EL.	AB
C515	VCEA0A1HW475M	J	4.7 50V EL.	AB
C516	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C517	VCEA0A1CW226M	J	22 16V EL.	AB
C520	VCEA0A1HW107M	J	100 50V EL.	AB
C530	VCYFYA1HA334J	J	0.33 50V Mylar	AB
C531	VCFYFA1HA564J	J	0.56 50V Mylar	AB
C606	VCKYPA2HB561K	J	560p 500V Ceramic	AA
C607	VCKYPA1HB472K	J	4700p 50V Ceramic	AA
▲△ C610	RC-FZ1018CEZZ	X	12600p 1.8kV Plastic	AG
C612	VCFPVC2DB514J	X	0.51 200V M-Poly.	AF
C632	VCKYCY1EB153K	J	0.015 25V Ceramic	AA
C633	VCEA0A1AW337M+	X	330 10V EL.	AE
C634	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C635	VCEA0A1HW105M	J	1.0 50V EL.	AB
C637	VCEA0A1CW476M	J	47 16V EL.	AB
C652	VCEA0A1HW475M	J	4.7 50V EL.	AB

Ref. No.	Part No.	★	Description	Code
C653	VCEA0A1HW105M	J	1.0 50V EL.	AB
C654	VCFYSA1HB184J	J	0.18 50V Mylar	AB
C662	VCEA0A1CW477M	J	470 16V EL.	AC
△ C701	RC-FZ037SCEZZ	J	0.22 AC250V Plastic	AD
	or			
	RC-FZ012SGEZZ			
	or			
	RC-FZ017SGEZZ			
	or			
	RC-FZ029SGEZZ			
C702	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
	or			
	RC-KZ0016CEZZ			
C703	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
	or			
	RC-KZ0016CEZZ			
△ C705	RC-EZ1336CEZZ	J	560 200V EL.	AQ
	or			
	RC-EZ0800CEZZ			
△ C706	RC-KZ0092GEZZ	J	0.0033 AC250V Ceramic	AC
	or			
	RC-KZ021SCEZZ			
	or			
	RC-KZ009SCEZZ			
	or			
	RC-KZ0106GEZZ			
C710	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
	or			
	RC-KZ0338CEZZ			
C717	VCKYPA2HB472K	J	4700p 500V Ceramic	AB
C723	RC-EZ0724CEZZ	J	100 160V EL.	AG
△ C725	RC-EZ0809CEZZ	J	220 160V EL.	AL
C726	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
	or			
	RC-KZ0338CEZZ			
C727	VCKYPA2HB472K	J	4700p 500V Ceramic	AB
△ C730	VCEA0A1CW108M	J	1000 16V EL.	AD
△ C731	VCEA0A1EW337M	J	330 25V EL.	AC
C732	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C735	VCCCCY1HH680J	J	68p 50V Ceramic	AA
C736	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C737	VCEA0A1EW226M	J	22 25V EL.	AB
C738	RC-KZ0040CEZZ	J	820p 2kV Ceramic	AD
	or			
	RC-KZ0340CEZZ			
C739	VCEA0A1HW104M	J	0.1 50V EL.	AB
C740	VCEA0A1EW476M	J	47 25V EL.	AB
C742	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C743	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
	or			
	RC-KZ0338CEZZ			
C750	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C753	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
	or			
	RC-KZ0338CEZZ			
C754	VCEA0A1CW476M	J	47 16V EL.	AB
C758	VCEA0A2EW106M	J	10 250V EL.	AD
C760	VCEA0A1CW108M	J	1000 16V EL.	AD
C771	VCEA0A1CW476M	J	47 16V EL.	AB
C772	VCEA0A1CW476M	J	47 16V EL.	AB
C783	VCQYTA1HM103K	J	0.01 50V Mylar	AB
C784	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C801	VCCCCY1HH180J	J	18p 50V Ceramic	AA
C807	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C808	VCEA0A1HW106M	J	10 50V EL.	AB
C809	VCEA0A1HW105M	J	1.0 50V EL.	AB
C811	VCKYCY1CB473K	J	0.047 16V Ceramic	AA
C812	VCEA0A1HW474M	J	0.47 50V EL.	AB
C901	VCEA0A1HW105M	J	1.0 50V EL.	AB
C925	VCEA0A1HW106M	J	10 50V EL.	AB
C1401	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1402	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1403	VCEA0A1CW476M	J	47 16V EL.	AB
C1405	VCEA0A1HW106M	J	10 50V EL.	AB
C1406	VCEA0A1HW106M	J	10 50V EL.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA462WEV1									
MAIN UNIT (Continued)									
C2001	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R211	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
C2002	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R212	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C2003	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	R220	VRS-CY1JF331J	J	330 1/16W M-Ox.	AA
C2004	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	R301	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C2006	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R302	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
C2040	VCEA0A1AW107M	J	100 10V EL.	AB	R304	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C2041	VCEA0A1HW105M	J	1.0 50V EL.	AB	R305	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
C2060	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	R306	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
C2061	VCKYCY1HB222K	J	2200p 50V Ceramic	AA	R308	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C2062	VCEA0A1AW107M	J	100 10V EL.	AB	R354	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
C2201	VCKYCY1HB682K	J	6800p 50V Ceramic	AA	R355	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C2202	VCCCCY1HH151J	J	150p 50V Ceramic	AA	R357	VRS-CY1JF822J	J	8.2k 1/16W M-Ox.	AA
C2203	VCCCCY1HH331J	J	330p 50V Ceramic	AA	R359	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C2601	VCEA0A1CW476M	J	47 16V EL.	AB	R401	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C2602	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R402	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C3001	VCEA0A1HW475M	J	4.7 50V EL.	AB	R403	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C3002	VCKYCY1HB562K	J	5600p 50V Ceramic	AA	R404	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
C3003	VCKYCY1EB123K	J	0.012 25V Ceramic	AA	R405	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C3004	VCEA0A1HW105M	J	1.0 50V EL.	AB	R411	VRS-CY1JF684J	J	680k 1/16W M-Ox.	AA
C3005	VCEA0A1HW475M	J	4.7 50V EL.	AB	R412	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
C3006	VCEA0A1HW106M	J	10 50V EL.	AB	R413	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C3007	VCEA0A1HW475M	J	4.7 50V EL.	AB	R414	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C3008	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	R426	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C3009	VCEA0A1CW227M	J	220 16V EL.	AC	R427	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C3010	VCEA0A1HW475M	J	4.7 50V EL.	AB	R431	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
C3011	VCEA0A1HW475M	J	4.7 50V EL.	AB	R432	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
C3012	VCEA0A1HW475M	J	4.7 50V EL.	AB	△ R451	VRS-RG2HC103J	J	10k 1/2W M-Ox.	AA
C3013	VCKYCY1HB272K	J	2700p 50V Ceramic	AA	R453	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
C3014	VCKYCY1CB473K	J	0.047 16V Ceramic	AA	R454	VRD-RM2HD184J	J	180k 1/2W Carbon	AA
C3015	VCEACA1HC335K	X	3.3 50V EL.	AF	R455	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
C3016	VCEA0A1HW475M	J	4.7 50V EL.	AB	R456	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
C3017	VCEACA1CC106K	J	10 16V EL.	AC	R457	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
C3018	VCEA0A1HW105M	J	1.0 50V EL.	AB	R458	VRD-RA2EE564J	J	560k 1/4W Carbon	AA
C3374	VCEA0A1HW225M	J	2.2 50V EL.	AB	R461	VRS-CY1JF274J	J	270k 1/16W M-Ox.	AA
C3375	VCEA0A1HW225M	J	2.2 50V EL.	AB	R462	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
C3376	VCKYCY1HB332K	J	3300p 50V Ceramic	AA	R491	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C3501	VCEA0A1HW106M	J	10 50V EL.	AB	R492	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C3502	VCEA0A1HW475M	J	4.7 50V EL.	AB	R493	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C3503	VCEA0A1HW475M	J	4.7 50V EL.	AB	R494	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
RESISTORS					R496	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
<i>[M-Ox... Metal Oxide, M-Film... Metal Film]</i>					R497	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
RJ1	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R512	VRD-RM2HD102J	J	1.0k 1/2W Carbon	AA
RJ2	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R513	VRD-RM2HD102J	J	1.0k 1/2W Carbon	AA
RJ3	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R514	VRD-RM2HD1R0J	J	1.0 1/2W Carbon	AA
RJ4	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R515	VRS-RG3DB271J+	X	270 2W M-Ox.	AE
RJ5	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R516	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
RJ6	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R517	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
RJ10	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R518	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
RJ11	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R519	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
RJ14	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R520	VRN-RL3AB1R0J+	X	1.0 1W M-Film	AE
RJ15	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R522	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
RJ16	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R523	VRS-CY1JF392J	J	3.9k 1/16W M-Ox.	AA
△ R53	VRS-RG3LB223J+	X	22k 3.0W M-Ox.	AE	R525	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
R54	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA	R527	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R55	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA	△ R604	VRS-RG3LB472J+	X	4.7k 3W M-Ox.	AF
R56	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA	R605	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R57	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R606	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R58	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	△ R607	VRS-RG3LB472J+	X	4.7k 3W M-Ox.	AF
R59	VRS-CY1JF1R0J	J	1.0 1/16W M-Ox.	AA	△ R609	VRS-RG3AB562J+	X	5.6k 1W M-Ox.	AE
R101	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA	R610	VRD-RM2HD220J	J	22 1/2W Carbon	AA
R102	VRS-CY1JF100J	J	10 1/16W M-Ox.	AA	R611	VRS-KA3NG3R3K	J	3.3 7W M-Ox.	AD
R201	VRS-CY1JF151J	J	150 1/16W M-Ox.	AA	△ R620	VRN-RL3ABR33J+	X	0.33 1W M-Film	AE
R202	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA	R622	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R203	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA	R623	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R204	VRS-CY1JF270J	J	27 1/16W M-Ox.	AA	R624	VRN-RA2BK472F	J	4.7k 1/8W M-Film	AA
R205	VRS-CY1JF331J	J	330 1/16W M-Ox.	AA	△ R626	VRN-RL3AB2R7J+	X	2.7 1W M-Film	AE
R206	VRD-RA2EE151J	J	150 1/4W Carbon	AA	R634	VRD-RM2HD121J	J	120 1/2W Carbon	AA
R207	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA	R635	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R209	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA	R636	VRD-RA2EE221J	J	220 1/4W Carbon	AA
R210	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA	△ R641	VRS-RG3AB682J+	X	6.8k 1W M-Ox.	AE
					△△ R651	VRS-RG2HC270J+	X	27 1/2W M-Ox.	AE
					△△ R653	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
					△△ R654	VRS-CY1JF154J	J	150k 1/16W M-Ox.	AA
					△△ R655	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
					R656	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA462WEV1				
MAIN UNIT (Continued)				
R657	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
R658	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R659	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
△ R661	VRN-RL3ABR47J+	X	0.47 1W M-Film	AE
△ R701	RR-DZ0049CEZZ	J	3.9M 1/2W Solid	AB
	or			
	RR-HZ0048CEZZ			
△ R703	VRW-KQ3NC1R2K	J	1.2 7W Cement	AE
△ R705	VRN-RL3ABR33J+	X	0.33 1W M-Film	AE
△ R706	VRN-RL3ABR22J+	X	0.22 1W M-Film	AE
R707	VRD-RM2HD270J	J	27 1/2W Carbon	AA
R708	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R710	VRS-RG2HC103J	J	10k 1/2W M-Ox.	AA
R711	VRD-RA2BE334J	J	330k 1/8W Carbon	AA
R712	VRD-RA2BE100J	J	10 1/8W Carbon	AA
R713	VRS-RG2HC122J+	X	1.2k 1/2W M-Ox.	AE
R715	VRD-RA2BE150J	J	15 1/8W Carbon	AA
R716	VRS-RG3AB121J+	X	120 1W M-Ox.	AE
R717	VRD-RA2EE102J	J	1.0k 1/4W Carbon	AA
R721	VRD-RM2HD104J	J	100k 1/2W Carbon	AA
R725	VRS-RG2HC821J+	X	820 1/2W M-Ox.	AE
R729	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R733	VRD-RA2EE394J	J	390k 1/4W Carbon	AA
R735	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R736	VRD-RM2HD184J	J	180k 1/2W Carbon	AA
R737	VRN-RL3ABR39J	X	0.39 1W M-Film	AE
R739	VRD-RM2HD332J	J	3.3k 1/2W Carbon	AA
R740	VRD-RM2HD470J	J	47 1/2W Carbon	AA
R741	VRN-RA2BK682F	J	6.8k 1/8W M-Film	AA
R742	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R744	VRN-RL2HCR68J+	X	0.68 1/2W M-Film	AE
R752	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
△ R758	VRS-RG2HC100J+	X	10 1/2W M-Ox.	AE
△ R773	VRS-RG3LB270J+	X	27 3W M-Ox.	AE
△ R774	VRS-RG3LB680J+	X	68 3W M-Ox.	AE
R801	VRD-RM2HD470J	J	47 1/2W Carbon	AA
R807	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R808	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
R809	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R810	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R925	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R926	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R961	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R962	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R1401	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R1402	VRS-CY1JF750J	J	75 1/16W M-Ox.	AA
R1403	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R1404	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R1410	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R2001	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2002	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2006	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2008	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R2009	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2010	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2011	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2016	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2018	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2020	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R2022	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2023	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R2024	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2025	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2026	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2027	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2028	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2029	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2032	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R2033	VRD-RA2BE684J	J	680k 1/8W Carbon	AA
R2034	VRS-CY1JF684J	J	680k 1/16W M-Ox.	AA
R2040	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
R2041	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R2042	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2043	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R2044	VRS-CY1JF683J	J	68k 1/16W M-Ox.	AA
R2045	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R2047	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2048	VRS-CY1JF562J	J	5.6k 1/16W M-Ox.	AA
R2049	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R2060	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2061	VRS-CY1JF562J	J	5.6k 1/16W M-Ox.	AA
R2062	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
R2063	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R2064	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R2065	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R2067	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2068	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2069	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2070	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2072	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2101	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2102	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2201	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2202	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
R2203	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R2211	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R2212	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
R2213	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
R2401	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2402	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2403	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2404	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2501	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R2503	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
R2504	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R2505	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
R2506	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
R2507	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA
R2508	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
R2509	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
R2601	VRD-RA2BE100J	J	10 1/8W Carbon	AA
R2602	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R2604	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R2605	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R3001	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R3002	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R3003	VRS-CY1JF105J	J	1.0M 1/16W M-Ox.	AA
R3004	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R3005	VRS-CY1JF623J	J	62k 1/16W M-Ox.	AA
R3007	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R3008	VRS-CY1JF302J	J	3.0k 1/16W M-Ox.	AA
R3010	VRS-CY1JF392J	J	3.9k 1/16W M-Ox.	AA
R3011	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R3012	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R3013	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R3014	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R3373	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R3374	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R3375	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
R3377	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R3378	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R3379	VRS-CY1JF683J	J	68k 1/16W M-Ox.	AA
R3501	VRS-CY1JF750J	J	75 1/16W M-Ox.	AA
R3502	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R3503	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R3504	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R3507	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R3508	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA

SWITCHES

S2501	QSW-K0202PEZZ	R	Power	AC
	or			
	QSW-K0079GEZZ			
S2502	QSW-K0202PEZZ	R	VOL-Down	AC
	or			
	QSW-K0079GEZZ			

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA462WEV1					PWB-B: DUNTK9510WEW2				
MAIN UNIT (Continued)					CRT UNIT				
S2503	QSW-K0202PEZZ	R	VOL-Up	AC	TRANSISTORS				
	or				Q851	VS2SC3198-Y-1	J	2SC3198-Y	AA
	QSW-K0079GEZZ				Q852	VS2SC3789//2E	J	2SC3789	AF
S2504	QSW-K0202PEZZ	R	CH-Down	AC		or			
	or					VS2SC3619LB1E			
	QSW-K0079GEZZ				Q853	VS2SC3198-Y-1	J	2SC3198-Y	AA
S2505	QSW-K0202PEZZ	R	CH-Up	AC	Q854	VS2SC3789//2E	J	2SC3789	AF
	or					or			
	QSW-K0079GEZZ					VS2SC3619LB1E			
S2506	QSW-K0202PEZZ	R	Menu	AC	Q855	VS2SC3198-Y-1	J	2SC3198-Y	AA
	or				Q856	VS2SC3789//2E	J	2SC3789	AF
	QSW-K0079GEZZ					or			
						VS2SC3619LB			
					Q881	VS2SA1266-Y-1	J	2SA1266-Y	AA
MISCELLANEOUS PARTS					DIODES				
△ F701	QFS-B4023CEZZ	J	Fuse 4A/125V	AC					
	or				D881	VHD1SS119//1	J	Diode	AB
	QFS-B4021GEZZ				D882	VHD1SS119//1	J	Diode	AB
FB601	RBLN-0047CEZZ	J	Ferrite Bead	AB	D884	VHD1SS119//1	J	Diode	AB
FB2002	RBLN-0037CEZZ	J	Ferrite Bead	AB	COIL				
FH701	QFSDH1013CEZZ	J	Fuse Holder	AC					
FH702	QFSDH1014CEZZ	J	Fuse Holder	AC	L851	VP-MK820K0000	J	Peaking 82μH	AB
J1401	QJAKG0074CEZZ	J	Jack, Video/Audio-in-2	AF					
			(Front)		CAPACITORS				
J1701	QTANJ0340CEZZ	X	Terminal, Video/Audio-in-1	AG					
			(Rear)			[EL... Electrolytic]			
P303	QPLGN0461CEZZ	J	Plug, 4-pin(S)	AB	C851	VCCSPA1HL391J	J	390p 50V	Ceramic AA
P401	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)	AB	C852	VCCSPA1HL331J	J	330p 50V	Ceramic AA
P601	QPLGN0160FJZZ	J	Plug, 5-pin(K)	AD	C853	VCCSPA1HL391J	J	390p 50V	Ceramic AA
P651	QPLGN0361CEZZ	J	Plug, 3-pin(TP651-3)	AB	C854	RC-KZ0024CEZZ	J	0.001 2kV	Ceramic AC
P701	QPLGN0260CEZZ	J	Plug, 2-pin(M)	AC		or			
P751	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)	AB		VCKYPB3DE472Z	J	0.0047 2kV	Ceramic AC
P2001	QPLGN0561CEZZ	J	Plug, 5-pin(TP2001-5)	AB	C883	VCEA0A1HW106M	J	10 50V	EL. AB
RMC2601	RRMCU0222CEZZ	J	R/C Receiver	AL					
	or				RESISTORS				
	RRMCU0227CEZZ					[M-Ox... Metal Oxide]			
	or				R851	VRD-RA2BE470J	J	47 1/8W	Carbon AA
	RRMCU0235CEZZ				R852	VRD-RA2BE181J	J	180 1/8W	Carbon AA
					R853	VRD-RA2BE121J	J	120 1/8W	Carbon AA
					R855	VRD-RA2BE471J	J	470 1/8W	Carbon AA
					R856	VRD-RA2BE221J	J	220 1/8W	Carbon AA
					△ R857	VRS-VV3LB123J	J	12k 3W	M-Ox. AB
					R858	VRD-RM2HD222J	J	2.2k 1/2W	Carbon AA
					R859	VRD-RA2BE470J	J	47 1/8W	Carbon AA
					R860	VRD-RA2BE181J	J	180 1/8W	Carbon AA
					R861	VRD-RA2BE121J	J	120 1/8W	Carbon AA
					R863	VRD-RA2BE471J	J	470 1/8W	Carbon AA
					R864	VRD-RA2BE221J	J	220 1/8W	Carbon AA
					△ R865	VRS-VV3LB123J	J	12k 3W	M-Ox. AB
					R866	VRD-RM2HD222J	J	2.2k 1/2W	Carbon AA
					R867	VRD-RA2BE470J	J	47 1/8W	Carbon AA
					R868	VRD-RA2BE181J	J	180 1/8W	Carbon AA
					R869	VRD-RA2BE121J	J	120 1/8W	Carbon AA
					R871	VRD-RA2BE471J	J	470 1/8W	Carbon AA
					R872	VRD-RA2BE221J	J	220 1/8W	Carbon AA
					△ R873	VRS-VV3LB123J	J	12k 3W	M-Ox. AB
					R874	VRD-RM2HD222J	J	2.2k 1/2W	Carbon AA
					R881	VRD-RA2BE102J	J	1.0k 1/8W	Carbon AA
					R882	VRD-RA2BE331J	J	330 1/8W	Carbon AA
					R883	VRD-RA2BE561J	J	560 1/8W	Carbon AA
					R884	VRD-RA2BE152J	J	1.5k 1/8W	Carbon AA
					R895	VRD-RA2BE470J	J	47 1/8W	Carbon AA
					MISCELLANEOUS PARTS				
RDA501	PRDAR0280PEFW	R	Heat Sink, for IC501	AF	P851	QPLGN0541CEZZ	J	Plug, 5-pin (GBN)	AB
RDA604	PRDAR0233PEFW	R	Heat Sink, for Q602	AK	P852	QPLGN0441CEZZ	J	Plug, 4-pin (YBN)	AB
RDA701	PRDAR0265PEFW	R	Heat Sink, for Q701	AD	SC851	QSOCV0937CEZZ	J	CRT Socket	AL
	TLABN0101GJZZ	X	Label	AE					
	LX-BZ3049GEFD	J	Screw	AA					
	LX-BZ3100CEFD	J	Screw	AA					
	LX-TZ3004CEFD	J	Screw	AA					

Ref. No.	Part No.	★	Description	Code
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MISCELLANEOUS PARTS

▲△ ACC701	QACCD3064CESA	J	AC Cord	AM
	or			
	QACCD3090CESA			
	VSP0080PBQ4YA	X	Speaker x2, 32 ohm	AH
	QCNW-0134MEZZ	X	Connecting Cord	AF
	QCNW-0166MEZZ	X	Connecting Cord	AE
	QCNW-0167MEZZ	J	Connecting Cord	AE

Ref. No.	Part No.	★	Description	Code
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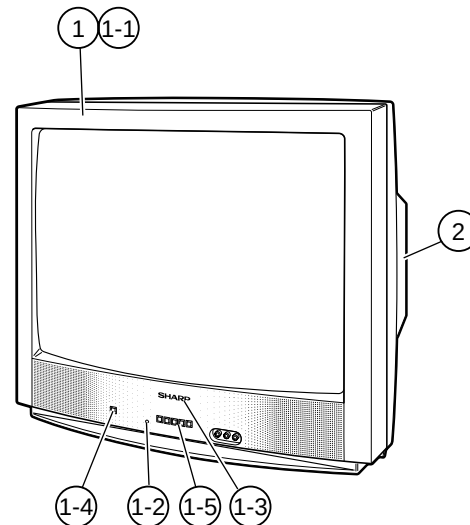
CABINET PARTS

1	CCABA0120WEH0	X	Front Cabinet Ass'y	BB
1-1	<i>Not Available</i>	—	Front Cabinet	—
1-2	GCOVA0109GJKA	X	Cover for R/C	AF
1-3	HBDGB1008MESB	X	Badge, "SHARP"	AG
1-4	JBTN-0109GJKA	X	Button (Power)	AE
1-5	JBTN-0110GJKA	X	Button (Vol-up/down, CH-up/down)	AE
2	GCABB0114GJKA	X	Rear Cabinet	AZ

SUPPLIED ACCESSORIES

RRMCG1626CESA	X	Infrared R/C Unit	AV
TGAN-0001GJZZ	X	Guarantee Card	AB
TiNS-7290GJZZ	X	Operation Manual	AG

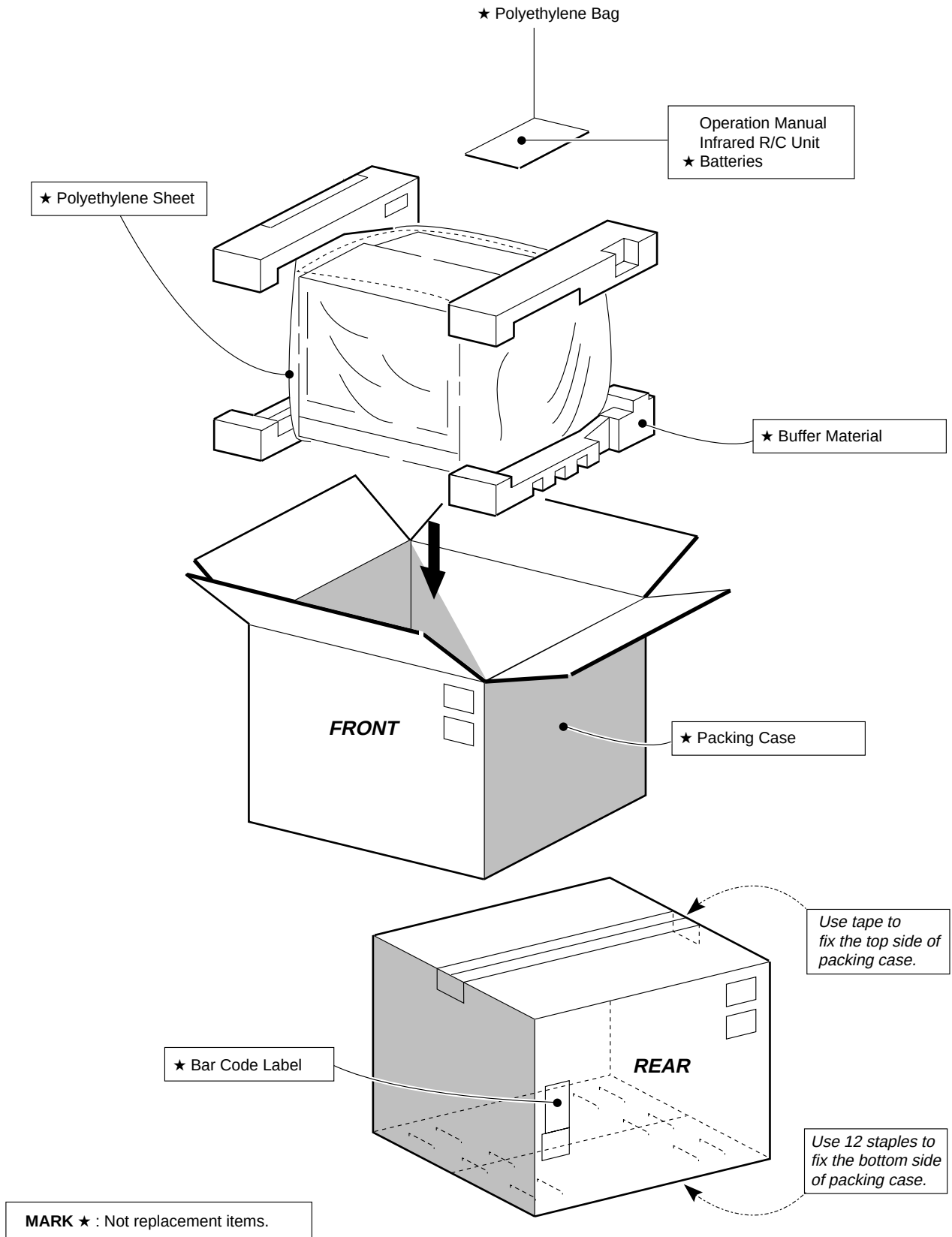
CABINET PARTS LOCATION



PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKC0155GJZZ	—	Packing Case	—
SPAKP0108GJZZ	—	Wrapping Paper	—
SPAKX0122GJZZ	—	Buffer Material	—
SSAKA0101GJZZ	—	Polyethylene Bag	—

PACKING OF THE SET



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